I 11

```
   AAAAAAAAA        CCCCCCCCCCCC  LLL              EEEEEEEEEEEEEEE  DDDDDDDDDDDD     TTTTTTTTTTTTTTT
   AAAAAAAAA        CCCCCCCCCCCC  LLL              EEEEEEEEEEEEEEE  DDDDDDDDDDDD     TTTTTTTTTTTTTTT
   AAAAAAAAA        CCCCCCCCCCCC  LLL              EEEEEEEEEEEEEEE  DDDDDDDDDDDD     TTTTTTTTTTTTTTT
AAA         AAA  CCC              LLL              EEE              DDD         DDD        TTT
AAA         AAA  CCC              LLL              EEE              DDD         DDD        TTT
AAA         AAA  CCC              LLL              EEE              DDD         DDD        TTT
AAA         AAA  CCC              LLL              EEE              DDD         DDD        TTT
AAA         AAA  CCC              LLL              EEE              DDD         DDD        TTT
AAA         AAA  CCC              LLL              EEE              DDD         DDD        TTT
AAA         AAA  CCC              LLL              EEEEEEEEEEEE     DDD         DDD        TTT
AAA         AAA  CCC              LLL              EEEEEEEEEEEE     DDD         DDD        TTT
AAA         AAA  CCC              LLL              EEEEEEEEEEEE     DDD         DDD        TTT
AAAAAAAAAAAAAAA  CCC              LLL              EEE              DDD         DDD        TTT
AAAAAAAAAAAAAAA  CCC              LLL              EEE              DDD         DDD        TTT
AAAAAAAAAAAAAAA  CCC              LLL              EEE              DDD         DDD        TTT
AAA         AAA  CCC              LLL              EEE              DDD         DDD        TTT
AAA         AAA  CCC              LLL              EEE              DDD         DDD        TTT
AAA         AAA  CCC              LLL              EEE              DDD         DDD        TTT
AAA         AAA     CCCCCCCCCCCC  LLLLLLLLLLLLLLL  EEEEEEEEEEEEEEE  DDDDDDDDDDDD           TTT
AAA         AAA     CCCCCCCCCCCC  LLLLLLLLLLLLLLL  EEEEEEEEEEEEEEE  DDDDDDDDDDDD           TTT
AAA         AAA     CCCCCCCCCCCC  LLLLLLLLLLLLLLL  EEEEEEEEEEEEEEE  DDDDDDDDDDDD           TTT
```

```
                                                                F 14
**FILE**ID**ACLEDTDEF




            AAAAAA        CCCCCCCC  LL          EEEEEEEEEE  DDDDDDDD    TTTTTTTTTT  DDDDDDDD    EEEEEEEEEE  FFFFFFFFFF
            AAAAAA        CCCCCCCC  LL          EEEEEEEEEE  DDDDDDDD    TTTTTTTTTT  DDDDDDDD    EEEEEEEEEE  FFFFFFFFFF
          AA      AA  CC          LL          EE          DD      DD      TT      DD      DD  EE          FF
          AA      AA  CC          LL          EE          DD      DD      TT      DD      DD  EE          FF
          AA      AA  CC          LL          EE          DD      DD      TT      DD      DD  EE          FF
          AA      AA  CC          LL          EE          DD      DD      TT      DD      DD  EE          FF
          AA      AA  CC          LL          EEEEEEEE    DD      DD      TT      DD      DD  EEEEEEEE    FFFFFFFF
          AA      AA  CC          LL          EEEEEEEE    DD      DD      TT      DD      DD  EEEEEEEE    FFFFFFFF
          AAAAAAAAAA  CC          LL          EE          DD      DD      TT      DD      DD  EE          FF
          AAAAAAAAAA  CC          LL          EE          DD      DD      TT      DD      DD  EE          FF
          AA      AA  CC          LL          EE          DD      DD      TT      DD      DD  EE          FF               ....
          AA      AA  CC          LL          EE          DD      DD      TT      DD      DD  EE          FF               ....
          AA      AA    CCCCCCCC  LLLLLLLLLL  EEEEEEEEEE  DDDDDDDD        TT      DDDDDDDD    EEEEEEEEEE  FF               ....
          AA      AA    CCCCCCCC  LLLLLLLLLL  EEEEEEEEEE  DDDDDDDD        TT      DDDDDDDD    EEEEEEEEEE  FF               ....

          RRRRRRRR    EEEEEEEEEE    QQQQQQ
          RRRRRRRR    EEEEEEEEEE    QQQQQQ
          RR      RR  EE          QQ      QQ
          RR      RR  EE          QQ      QQ
          RR      RR  EE          QQ      QQ
          RR      RR  EE          QQ      QQ
          RRRRRRRR    EEEEEEEE    QQ      QQ
          RRRRRRRR    EEEEEEEE    QQ      QQ
          RR  RR      EE          QQ  QQ  QQ
          RR  RR      EE          QQ  QQ  QQ
          RR    RR    EE          QQ    QQ
          RR    RR    EE          QQ    QQ
          RR      RR  EEEEEEEEEE    QQQQ  QQ
          RR      RR  EEEEEEEEEE    QQQQ  QQ
```

```
!
! DEFINITION FILE FOR ACL EDITOR COMPILATION
!
!       Version 'V04-000'
!
!****************************************************************************
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!****************************************************************************
!
!++
!
! FACILITY:     Miscellaneous utilities
!
! ABSTRACT:
!
!       These are the data stucture definitions and random macros
!       used to compile the ACL editor.
!
! ENVIRONMENT:
!
!       VAX/VMS operating system, user mode utilities.
!
!
!--
!
!
! AUTHOR:       L. Mark Pilant          CREATION DATE:  7-Jul-1982  10:10
!
! MODIFIED BY:
!
!       V03-009 LMP0270         L. Mark Pilant,         29-Jun-1984  8:51
!               Add definition for the control-C abort message.
!
!       V03-008 LMP0213         L. Mark Pilant,         24-Mar-1984  12:23
!               Add support for locking and unlocking the object's ACL.
!
```

```
!       V03-007 LMP0193         L. Mark Pilant,         14-Feb-1984  12:44
!               Move the journal and recovery file RMS structures to the
!               common storage as they are referenced from multiple modules.
!
!       V03-006 LMP0181         L. Mark Pilant,         17-Jan-1984  10:02
!               Add support for the $CHANGE_ACL system service instead of
!               direct ACP calls.
!
!       V03-005 LMP0172         L. Mark Pilant,         28-Nov-1983  12:11
!               Numerous bug fixes, support for VT2xx terminals, and a
!               session keystroke logger.
!
!       V03-004 LMP0138         L. Mark Pilant,         17-Aug-1983  8:59
!               Misc fixes to prompt mode to cure ACCVIOs.
!
!       V03-003 LMP0124         L. Mark Pilant,         22-Jun-1983  11:37
!               Change OWNER access definition to CONTROL.
!
!       V03-002 LMP0103         L. Mark Pilant,         20-Apr-1983  10:23
!               Add support for the HIDDEN and PROTECTED ACE flag bits.
!
!       V03-001 LMP0074         L. Mark Pilant,         20-Jan-1983  12:02
!               Add support for modifying the RMS journal bits if the
!               curresponding ACE is added or deleted.
!
!**
```

```
! Local definition files.

REQUIRE 'LIB$:AEDLCLDEF';

! Declare VAX built in functions.

BUILTIN
        INSQUE,
        REMQUE;

! Macros to allocate and deallocate dynamic memory.

MACRO
        ALLOCATE (SIZE, ADDRESS) =
                BEGIN
                EXTERNAL ROUTINE        LIB$GET_VM : ADDRESSING_MODE (GENERAL);
                LOCAL   VM_STATUS;
                VM_STATUS = LIB$GET_VM (%REF (SIZE), ADDRESS);
                IF .VM_STATUS THEN CH$FILL (0, SIZE, .ADDRESS);
                .VM_STATUS
                END
                %,

        DEALLOCATE (SIZE, ADDRESS) =
                BEGIN
                EXTERNAL ROUTINE        LIB$GET_VM : ADDRESSING_MODE (GENERAL);
                LIB$FREE_VM (%REF (SIZE), ADDRESS);
                END
                %;

! Macro to signal an error and save the worst case error condition.

MACRO
        SIGNAL  (ARG) =
                BEGIN
                EXTERNAL ROUTINE        LIB$SIGNAL : ADDRESSING_MODE (GENERAL);
                IF .AED_L_FLAGS[AED_V_SCOPE]
                THEN
                    BEGIN
                    SCR$ERASE_PAGE (21, 1);
                    SCR$SET_CURSOR (21, 1);
                    END;
                LIB$SIGNAL (ARG %IF %LENGTH-1 GTR 0 %THEN, %REMAINING %FI);
                IF .AED_L_FLAGS[AED_V_SCOPE]
                THEN SCR$SET_CURSOR (.AED_B_LINE, .AED_B_COLUMN);
                IF (ARG AND STS$M_SEVERITY) NEQ STS$K_WARNING
                AND (.AED_L_WORSTERR AND STS$M_SEVERITY) LSS
                    (ARG AND STS$M_SEVERITY) THEN AED_L_WORSTERR = ARG;
                END
                %;

! Shared message definitions.

$SHR_MSGDEF     (AED, 277, LOCAL,
                (OPENIN, ERROR),
                (CLOSEIN, ERROR),
                (READERR, ERROR),
                (WRITEERR, ERROR)
                );
```

```
! Define common storage structure.

PSECT   OWN=AED_COMMON(OVERLAY,ADDRESSING_MODE(WORD_RELATIVE),ALIGN(0));

OWN
        AED_L_FLAGS     : $BBLOCK [4],          ! Useful flags
        AED_B_OPTIONS   : $BBLOCK [1],          ! Qualifier option flags
        AED_L_OBJTYP,                           ! Target object type code
        AED_Q_OBJNAM    : $BBLOCK [DSC$C_S_BLN],        ! Object name descr
        AED_L_WORSTERR,                         ! Worst error encountered
        AED_L_PAGEWIDTH,                        ! Device line width
        AED_L_PAGESIZE,                         ! Number of lines on the page
        AED_B_COLUMN    : VECTOR [1,BYTE],      ! Current column position
        AED_B_LINE      : VECTOR [1,BYTE],      ! Current line position
        AED_B_SAVE_COL  : VECTOR [1,BYTE],      ! Last set column position
        AED_B_SAVE_LIN  : VECTOR [1,BYTE],      ! Last set line position
        AED_Q_LINETABLE : $BBLOCK [12],         ! Input line queue head
                                                ! Note:  Extra longword is
                                                ! necessary because of the way
                                                ! the string search loop is
                                                ! designed.
        AED_L_CURACE    : REF $BBLOCK,          ! Address of current ACE
        AED_L_FIRSTLINE : REF $BBLOCK,          ! First line segment of ACE
        AED_L_LASTLINE  : REF $BBLOCK,          ! Last line segment of ACE
        AED_L_BEGINLINE : REF $BBLOCK,          ! Address of first line in display
        AED_W_INPUTLEN  : VECTOR[1,WORD],       ! Size of current ACE text
        AED_Q_DEL_ACE   : $BBLOCK [8],          ! Deleted ACE line queue head
        AED_Q_DEL_LINE  : $BBLOCK [DSC$C_S_BLN],        ! Deleted line descr
        AED_Q_DEL_WORD  : $BBLOCK [DSC$C_S_BLN],        ! Deleted word descr
        AED_B_DEL_CHAR  : VECTOR [1,BYTE],      ! Deleted character
        AED_A_ACLBUFFER : REF $BBLOCK,          ! Address of binary ACE
        AED_Q_OUTLINE   : $BBLOCK [DSC$C_S_BLN],        ! Output line descr
        AED_W_OBJCHAN   : VECTOR [1,WORD],      ! Channel for ACL I/O
        AED_W_TERMIN    : VECTOR [1,WORD],      ! Terminal input channel
        AED_W_TERMOUT   : VECTOR [1,WORD],      ! Terminal output channel
        AED_W_IOSB      : VECTOR [4,WORD],      ! I/O status block
        AED_L_STATUS,                           ! Routine exit status
        AED_B_FIELD     : VECTOR [1,BYTE],      ! Current field number
        AED_W_FIELDBEG  : VECTOR [1,WORD],      ! Beginning position of field
        AED_W_FIELDEND  : VECTOR [1,WORD],      ! End position of field
        AED_B_ITEM      : VECTOR [1,BYTE],      ! Current item number
        AED_W_ITEMBEG   : VECTOR [1,WORD],      ! Beginning position of item
        AED_W_ITEMEND   : VECTOR [1,WORD],      ! End position of item
        AED_B_ACETYPE   : VECTOR [1,BYTE],      ! ACE type (for prompting)
        AED_W_JOURNAL   : VECTOR [1,WORD],      ! RMS journaling flags from header
        AED_T_CURLINE   : $BBLOCK [512 + $BYTEOFFSET (LINE_T_TEXT)],
                                                ! Input line segment storage
        AED_W_TOTALSIZE : VECTOR [1,WORD],      ! Total size of all ACE segments

! Journal and recovery file RMS data structures.

        JOURNAL_FAB     : $FAB_DECL,            ! Journal file FAB
        JOURNAL_NAM     : $NAM_DECL,            ! Journal file NAM block
        JOURNAL_RAB     : $RAB_DECL,            ! Journal file RAB
        JOURNAL_XABPRO  : $XABPRO_DECL,         ! Journal file PROtection XAB
        JOURNAL_BUFFER  : VECTOR [10, BYTE],    ! Storage for journaled keys
        JOURNAL_INDEX,                          ! Index into journal buffer
        RECOVER_FAB     : $FAB_DECL,            ! Recovery file FAB
        RECOVER_NAM     : $NAM_DECL,            ! Recovery file NAM block
        RECOVER_RAB     : $RAB_DECL,            ! Recovery file RAB
        RECOVER_BUFFER  : VECTOR [10, BYTE],    ! Storage for recovery record
        RECOVER_INDEX;                          ! Index into recovery buffer

PSECT   OWN=$OWN$(CONCATENATE,ADDRESSING_MODE(WORD_RELATIVE),ALIGN(2));
```

```
! External routines

EXTERNAL ROUTINE
        CLI$GET_VALUE   : ADDRESSING_MODE (GENERAL),    ! Get qualifier value
        CLI$PRESENT     : ADDRESSING_MODE (GENERAL),    ! See if qualifier present
        LIB$FREE_VM     : ADDRESSING_MODE (GENERAL),    ! Release dynamic memory
        LIB$GET_VM      : ADDRESSING_MODE (GENERAL),    ! Allocate dynamic memory
        LIB$TPARSE      : ADDRESSING_MODE (GENERAL),    ! General purpose parser
        SCR$DOWN_SCROLL : ADDRESSING_MODE (GENERAL),! Scroll display down 1 line
        SCR$ERASE_LINE  : ADDRESSING_MODE (GENERAL),    ! Erase a line of the display
        SCR$ERASE_PAGE  : ADDRESSING_MODE (GENERAL),    ! Erase a portion of the display
        SCR$SET_CURSOR  : ADDRESSING_MODE (GENERAL),    ! Set display cursor position
        SCR$SET_SCROLL  : ADDRESSING_MODE (GENERAL),    ! Set display scrolling region
        SCR$UP_SCROLL   : ADDRESSING_MODE (GENERAL);    ! Scroll display up 1 line

! External error message definitions

EXTERNAL LITERAL

! Fatal error.

        AED$_OBJLOCKED,

! Recoverable errors.

        AED$_BADKEEP,
        AED$_LOCATERR,
        AED$_INIREADERR,

! Warning messages.

        AED$_JOUWRITERR,
        AED$_JOUOPENOUT,
        AED$_JOUCLOSOUT,
        AED$_RECREADERR,
        AED$_RECOPENIN,
        AED$_RECLOSEIN,
        AED$_BADUIC,
        AED$_BADGRPMEM,
        AED$_SYNTAX,
        AED$_BADTYPE,
        AED$_NOITEMSEL,
        AED$_MUSTENTER,
        AED$_INIOPENIN,
        AED$_INICLOSIN,
        AED$_DEFSYNTAX,
        AED$_NODELETE,
        AED$_NOMODIFY,
        AED$_NOHIDDEN,
        AED$_DUPLICATE,
        AED$_NOCOMBINE,
        AED$_NODEFAULT,

! Informational messages.

        AED$_NOCTRLCHAR,
        AED$_NOTFOUND,
        AED$_CONTROL_C,

! Success messages.

        AED$_ACLUPDATED,
        AED$_NOCHANGE;
```

0002 AH-BT13A-SE
VAX/VMS V4.0

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